



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/628,211

07/29/2003

Paul Joseph Brady

P23661

5476

7055 7590 08/27/2008  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

STACE, BRENT S

ART UNIT

PAPER NUMBER

2161

NOTIFICATION DATE

DELIVERY MODE

08/27/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/628,211  
Filing Date: July 29, 2003  
Appellant(s): BRADY ET AL.

---

Joshua M. Povsner  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/13/2008 appealing from the Office action mailed 1/15/2008.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,661,792	Akinpelu et al.	08-1997
6,570,973	Boughman et al.	05-2003
5,987,452	Kung	11-1999

6,496,828	Cochrane et al.	12-2002
4,975,942	Zebryk	12-1990

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Appellant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 9, 28-35, 36, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.).

**Claim 1** can be mapped to Akinpelu as follows: “A method of identifying a local service provider of a caller in response to a telephone call from the caller to a called party, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the method comprising:

- receiving a request in a first format from a sender for an identity of the caller's local service provider, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the call having been suspended at a switch of an interexchange carrier; [Akinpelu, col. 4, lines 1-5]
- sending a request in a second format to an LNP database, based on a telephone number of the caller, [Akinpelu, cols. 3-4, lines 53-5] to determine which of a plurality of databases to query, [Akinpelu, col. 3, lines 53-63] the second format being distinct from the first format; [Akinpelu, cols. 8-9, lines 51-5]
- receiving an identification of a database to query from the LNP database; [Akinpelu, col. 3, col. 53-63]
- determining a message type to send to the identified database to query; [Akinpelu, col. 4, lines 1-11 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33] and
- launching a query to the identified database; [Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33]
- ...sending a notification to the sender, [Akinpelu, col. 6, lines 20-25 with Akinpelu, col. 4, lines 45-59] the notification comprising identifying information of the identified local service provider of the caller [Akinpelu, col. 6, lines 20-25] and

Art Unit: 2161

whether an agreement exists between the identified local service provider and the interexchange carrier” [Akinpelu, col. 4, lines 45-59].

Akinpelu discloses the above limitation but does not expressly teach:

- “...wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party.”

With respect to Claim 1, an analogous art, Boughman, teaches:

- “...wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party” [Boughman, col. 3, lines 29-35 with Boughman, Fig. 2 with Boughman, col. 7, lines 10-14].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Boughman with Akinpelu because both inventions are directed towards the use of telecommunication systems.

Boughman’s invention would have been expected to successfully work well with Akinpelu’s invention because both inventions use telecommunication systems with databases and customers. Akinpelu discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu does not expressly disclose using the notification to decide whether to connect the suspended call to the called party. Boughman discloses a system and method for toll notification when placing a call comprising notifying the user of whether a toll call is being placed and the MSC (interexchange carrier) deciding from the indication notification from the IN database whether or not to connect the call (based on user interaction or that call status (toll or not toll)).

It would have been obvious to one of ordinary skill in the art at the time of invention to take the notification from Boughman and install it into the method of Akinpelu, thereby offering the obvious advantage of giving the customer an opportunity if they wish to complete the call or not based on the notification or automatically connecting the call if no toll charges will be inflicted (thereby avoiding user frustration).

Akinpelu does not explicitly teach "...receiving an identification of the caller's local service provider from the identified database in response to the query" since the originating caller's originating carrier is identified via a trunk identification or signaling information [Akinpelu, col. 4, lines 47-51] however, it is obvious to one of ordinary skill in the art that a caller's local service provider (carrier) is identified in the same manner that the terminating party's local service provider (carrier) is determined since the ANI is transmitted to the interexchange carrier [Akinpelu, col. 4, lines 5-7] and since a telephone number is all that is required to determine the terminating (caller's) party's local service provider [Akinpelu, col. 4, lines 8-11]. Doing so would offer the obvious advantage of verifying the originating carrier through the national database(s). The citations that would support the mapping the limitation above to Akinpelu are "...receiving an identification of the caller's local service provider from the identified database in response to the query" [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 9** can be mapped to Akinpelu (as modified by Boughman) as follows: "The method according to claim 1, wherein at least one of the plurality of databases

Art Unit: 2161

comprises a line information database” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 28** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the query comprises a GetData query” [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 29** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the query comprises an originating line number screening query” [Akinpelu, col. 4, lines 45-67].

**Claim 30** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the query comprises a billed number screening query” [Akinpelu, col. 4, lines 45-67].

**Claim 31** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, further comprising sending a request to an access routing guide to determine which of a plurality of databases to query” [Akinpelu, col. 7, lines 20-25].

**Claim 32** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 31, wherein the access routing guide comprises a line information database (LIDB) access routing guide” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 7, lines 20-25].



**Claim 33** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein receiving an identification of the caller’s local service provider further comprises receiving an identification of a revenue accounting office, account owner, and billing service provider associated with the telephone number of the caller” [Akinpelu, col. 4, lines 45-67 with Akinpelu, col. 5, lines 13-16 with Akinpelu, col. 5, lines 31-36].

**Claim 34** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the first format comprises a text format” [Akinpelu, cols. 8-9, lines 51-5].

**Claim 35** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the first format comprises a ASCII text” [Akinpelu, cols. 8-9, lines 51-5].

**Claim 36** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1, wherein the second format comprises an SS7 format” [Akinpelu, cols. 8-9, lines 51-5].

**Claim 42** can be mapped to Akinpelu (as modified by Boughman) as follows:

“The method according to claim 1 wherein the requests include queries and responses, and the first and second formats of the requests enable queries and responses to be correlated, thereby enabling the identification of the local service provider to occur in real time” [Akinpelu, col. 4, lines 45-59 with Akinpelu, cols. 3-4, lines 53-5].

Art Unit: 2161

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.), further in view of U.S. Patent No. 6,496,828 (Cochrane et al.).

For **Claim 2**, Akinpelu (as modified by Boughman) teaches: “The method according to claim 1.”

Akinpelu (as modified by Boughman) discloses the above limitation but does not expressly teach: “wherein the determining of message type is based upon a cost associated with each of a plurality of available message types.”

With respect to Claim 2, an analogous art, Cochrane, teaches: “wherein the determining of message type is based upon a cost associated with each of a plurality of available message types” [Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Cochrane with Akinpelu (as modified by Boughman) because both inventions are directed towards querying databases.

Cochrane’s invention would have been expected to successfully work well with Akinpelu (as modified by Boughman)’s invention because both inventions use databases. Akinpelu (as modified by Boughman) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Boughman) does not expressly disclose determining the message type is based upon a cost associated with each available message types. Cochrane discloses support for summary tables in a

Art Unit: 2161

heterogeneous database environment comprising querying a database by selecting a least cost query for the database being queried.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and install it into the method of Akinpelu (as modified by Boughman), thereby offering the obvious advantage of determining the best query to perform to get the appropriate data to reduce query impact on the database.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,570,973 (Boughman et al.), further in view of U.S. Patent No. 5,987,452 (Kung).

For **Claim 3**, Akinpelu (as modified by Boughman) teaches: "The method according to claim 1."

Akinpelu (as modified by Boughman) discloses the above limitation but does not expressly teach: "wherein the determining of message type is based upon the message type supported by the identified database."

With respect to Claim 3, an analogous art, Kung, teaches: "wherein the determining of message type is based upon the message type supported by the identified database" [Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Kung with Akinpelu (as modified by Boughman) because both inventions are directed towards querying databases used in telephone service.

Kung's invention would have been expected to successfully work well with Akinpelu (as modified by Boughman)'s invention because both inventions use databases. Akinpelu (as modified by Boughman) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Boughman) does not expressly disclose that the determination of the message type is based upon the message type supported by each of the databases. Kung discloses a query translation system comprising translating a query so that the query can be executed in a different database system.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the query methods from Kung and install it into the method of Akinpelu (as modified by Boughman), thereby offering the obvious advantage of gaining support for querying other databases from one location.

Claims 18, 21, 22, 24, 37-39, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,496,828 (Cochrane et al.), further in view of U.S. Patent No. 5,987,452 (Kung).

For **Claim 18**, Akinpelu teaches: "A system for identifying a local service provider of a caller associated with a telephone call from the caller to a called party, [Akinpelu, Figs. 1, 7 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59] the system comprising:

Art Unit: 2161

- a gateway comprising a plurality of platforms configured to dynamically load share requests, [Akinpelu, col. 3, lines 23-34] the gateway receiving a request in a first format requesting an identification of the local service provider of the caller, [Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59 with Akinpelu, cols. 8-9, lines 51-5] the gateway configured to determine one of a plurality of message types in which to query an identified database, [Akinpelu, col. 3, col. 53-55 with Akinpelu, col. 4, lines 1-11 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33] the identified database being determined as a result of sending a request in a second format distinct from the first format to an LNP database and receiving a response from the LNP database, [Akinpelu, cols. 8-9, lines 51-5] to launch a query to the identified database” [Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

Akinpelu discloses the above limitations but does not expressly teach:

- “...wherein the gateway determines the message type based upon a cost associated with each of a plurality of available message types and based upon a message type supported by the identified database.”

With respect to Claim 18, an analogous art, Cochrane, teaches:

- “...wherein the gateway determines the message type based upon a cost associated with each of a plurality of available message types” [Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29 with Akinpelu, col. 5, lines 60-65].

With respect to Claim 18, an analogous art, Kung, teaches:

Art Unit: 2161

- “...and based upon a message type supported by the identified database” [Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Cochrane and Kung with Akinpelu because the inventions are directed towards querying databases.

Cochrane's and Kung's inventions would have been expected to successfully work well with Akinpelu's invention because the inventions use databases. Akinpelu discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu does not expressly disclose determining the message type is based upon a cost associated with each available message types and based upon a message type supported by the one of the plurality of databases. Cochrane discloses support for summary tables in a heterogeneous database environment comprising querying a database by selecting a least cost query for the database being queried. Kung discloses a query translation system comprising translating a query so that the query can be executed in a different database system.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the querying method(s) from Cochrane and Kung and install them into the method of Akinpelu, thereby offering the obvious advantage of determining the best and correct query to perform to get the appropriate data to reduce query impact on the database thereby gaining support for querying other databases from one location.

Akinpelu does not expressly teach “the gateway receiving a request requesting an identification of the local service provider of the caller” and “to receive an identification of the local service provider of the caller” since the originating caller’s originating carrier is identified via a trunk identification or signaling information [Akinpelu, col. 4, lines 47-51] however, it is obvious to one of ordinary skill in the art that a caller’s local service provider (carrier) is identified in the same manner that the terminating party’s local service provider (carrier) is determined since the ANI is transmitted to the interexchange carrier [Akinpelu, col. 4, lines 5-7] and since a telephone number (ANI) is all that is required to determine the terminating (caller’s) party’s local service provider [Akinpelu, col. 4, lines 8-11]. Doing so would offer the obvious advantage of verifying the originating carrier through the national database(s). The citations that would support the mapping the limitations above to Akinpelu are “the gateway receiving a request requesting an identification of the local service provider of the caller” and “to receive an identification of the local service provider of the caller” [Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11].

**Claim 21** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18, wherein the request is received prior to the telephone call being connected to the called party” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 22** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18, wherein the request is received during the

pendency of the telephone call” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 24** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18, wherein the identified database comprises a line information database” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 37** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18, wherein the request is received after the call has been connected to the called party and before the call has been disconnected” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 38** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18, the identified database having been identified as a result of a request sent to an LNP database and a request sent to an access routing guide” [Akinpelu, col. 6, lines 25-33 with Akinpelu, col. 7, lines 20-25].

**Claim 39** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 38, wherein the access routing guide comprises a line information database (LIDB) access routing guide” [Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33].

**Claim 43** can be mapped to Akinpelu (as modified by Cochrane and Kung) as follows: “The system according to claim 18 wherein the requests include queries and responses, and the first and second formats of the requests enable the queries and



Art Unit: 2161

responses to be correlated, thereby enabling the identification of the local service provider of the caller to occur in real time” [Akinpelu, col. 4, lines 45-59 with Akinpelu, cols. 3-4, lines 53-5].

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,661,792 (Akinpelu et al.) in view of U.S. Patent No. 6,496,828 (Cochrane et al.) in view of U.S. Patent No. 5,987,452 (Kung), further in view of U.S. Patent No. 4,975,942 (Zebryk).

For **Claim 23**, Akinpelu (as modified by Cochrane and Kung) teaches: “The system according to claim 18.”

Akinpelu (as modified by Cochrane and Kung) discloses the above limitation but does not expressly teach: “wherein the request is received after the telephone call has been disconnected.”

With respect to Claim 23, an analogous art, Zebryk, teaches: “wherein the request is received after the telephone call has been disconnected” [Zebryk, col. 3, lines 15-39 with Akinpelu, col. 4, lines 45-59].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Zebryk with Akinpelu (as modified by Cochrane and Kung) because both inventions are directed towards the use of telecommunication systems.

Zebryk’s invention would have been expected to successfully work well with Akinpelu (as modified by Cochrane and Kung)’s invention because both inventions use telecommunication systems with databases and customers. Akinpelu (as modified by

Art Unit: 2161

Cochrane and Kung) discloses completing telecommunications calls in a competitive local and toll environment comprising querying a database, however Akinpelu (as modified by Cochrane and Kung) does not expressly disclose launching a query after the telephone call. Zebryk discloses a credit/calling card pay telephone method and system employing telephone unit local card-checking and other intelligence cooperative with local personal host computer comprising recording call information after the call has terminated.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the notification from Zebryk and install it into the method of Akinpelu (as modified by Cochrane and Kung), thereby offering the obvious advantage of accurately recording call records of Akinpelu (as modified by Cochrane and Kung).

#### **(10) Response to Argument**

##### Summary of primary art Akinpelu:

Akinpelu's invention is generally concerned with determining if a call is a local call or a toll call to determine how to charge subscribers. Existing telephone technology is demonstrated in Akinpelu, Fig. 1. Calls are first routed through a local exchange carrier (a.k.a. local service provider (Akinpelu, col. 2, lines 65-66)). The local exchange carrier then determines, using at least a database, the number of the caller, and the number of the called party if the call is a local call or a toll (for example, long distance) call (Akinpelu, col. 3, lines 50-55). If it is a local call, a preferred terminating carrier and switch is identified and the call is completed (Akinpelu, col. 4, lines 28-33). If it is a toll call, a pre-subscribed (or customer specified) interexchange carrier is identified and

Art Unit: 2161

used to route the call to a terminating carrier and terminating switch local to the called party (Akinpelu, col. 4, lines 1-11). Then, a detailed billing/call record is created (Akinpelu, col. 4, lines 60-67).

As to the Appellant's arguments with respect to Claims 1 (and 18) for the prior art(s) allegedly not teaching "**method of identifying a local service provider of a caller in response to a telephone call from the caller to a called party**," the examiner respectfully disagrees. Akinpelu, col. 2, lines 64-66 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 4, lines 45-59 was used to reject this limitation. Akinpelu, col. 4, lines 45-59 teaches this limitation particularly well in that Akinpelu, col. 4, lines 45-59 teaches that the interexchange carrier identifies the originating carrier. The originating carrier is the local exchange carrier (e.g. Fig. 1). As shown above and in Akinpelu, col. 2, lines 65-66, the local exchange carrier is also known as the local service provider. As such, the local service provider of a caller is identified by the interexchange carrier in response to a telephone call from the caller to a called party.

The Appellant further argues this point in that the originating telephone number could have been resold to another local service provider (therefore, potentially, an incorrect local service provider may be identified). However, given the teachings in Akinpelu, there is no reason why the true identity of the local service provider would not be identified correctly. Additionally, even if this was the case and according to the Appellant's suggestion, there is still a situation in Akinpelu where the true identity of the local service provider is identified correctly (e.g. where the originating telephone number

Art Unit: 2161

has not been resold to another local service provider). Also, it should be mentioned that Akinpelu has a situation where a customer switches local service providers. Akinpelu, col. 3, lines 45-50 teaches:

“The customer's new local service provider is responsible for the update for the case in which the customer changes service providers. When a customer switches carriers, the original local carrier may be required to forward calls for a short period (a few days) until the database has been updated.”

As such, and from result of the forwarding, a correct local service provider will still be identified.

As to the Appellant's arguments with respect to Claims 1 (and 18) for the prior art(s) allegedly not teaching “**mak[ing] a query to a LNP database for the purpose of identifying the service provider of the caller** (in California),” the examiner respectfully disagrees. The examiner notes that this is not an explicitly claimed limitation, but it appears to be a summation of the general idea of several claimed limitations argued by example. As such, appropriate weight should be applied to the validity of this argument on the exactly claimed subject matter in relation to this argument. The examiner would also like to point out the acronym LNP used in the claims and arguments. LNP stands for Local Number Portability (or Location Number Portability). Generally, this is used to keep the same telephone number when changing service providers/carriers. LNP information is updated for every customer whose carrier supports LNP and when the customer's carrier changes (citations in Akinpelu to follow). Akinpelu, Fig. 2 (along with Akinpelu, col. 3, lines 34-50) shows that LNP information is data stored in the national database (NUDB) of the interexchange carriers and/or local database (LUDB) of the

Art Unit: 2161

local exchange carriers/service providers. At least these databases are queried to determine the ANI (number of the caller) (Akinpelu, col. 4, lines 5-7, additionally, the ANI is known in the art as the number of the caller). The ANI and originating carrier are identified for billing record purposes (Akinpelu, col. 4, lines 55-56 (toll) and 66-67 (local)). Local databases must be queried (especially when the number recently changed carriers) in order to determine the service provider/originating carrier of the caller (using the ANI). This is especially important when a call is being forwarded (or not) (to make sure the caller is still with a certain carrier upon a call being made) (Akinpelu, col. 3, lines 45-50). Alternatively, when a query is made to the LNP NUDB of an interexchange carrier, the service provider/originating carrier is identified (for example, via Trunk ID) (Akinpelu, col. 4, lines 45-51). As such, an LNP database is queried for the purpose of identifying a service provider of the caller (for example, a caller in California).

As to the Appellant's arguments with respect to Claims 1 (and 18) for the prior art(s) allegedly not teaching "**wherein the interexchange carrier uses the notification to decide whether to connect the suspended call to the called party,**" the examiner respectfully disagrees. Boughman, col. 3, lines 29-35 with Boughman, Fig. 2 with Boughman, col. 7, lines 10-14 was used to reject this limitation. Boughman generally notifies the caller if they are about to place a toll/long distance call and gives the user sufficient time to terminate/abort the call before the call is connected (Boughman, col. 3, lines 29-46 with Boughman, col. 7, lines 11-24). The claimed notification is claimed as including the local service provider of the caller and whether an agreement between the

Art Unit: 2161

local service provider and interexchange carrier. Akinpelu teaches this notification in that the local service provider of the caller is identified in order to tell if the call is toll or not and an whether agreement between the local service provider and interexchange carrier can be a billing agreement (Akinpelu, col. 4, lines 45-59) or a pre-subscribed interexchange carrier agreement (Akinpelu, col. 4, line 2). If an interexchange carrier (IXC or IC) is used, the call will be a toll call (according to at least the teachings in Akinpelu). As such, the call is suspended during call processing (discussed further below) in order for the caller to decide to connect the suspended call to the called party. As such, the IXC (interexchange carrier) uses the caller information (e.g. who to notify of a toll call being placed or identifying a local service provider of the caller) and agreement information (e.g. billing information) in order to decide whether to connect the suspended call to the called party (based on caller response to the notification that the call is a toll call) (Boughman, col. 7, lines 11-24).

As to the Appellant's arguments with respect to Claims 1 (and 18) for the prior art(s) allegedly not teaching "**that an interexchange carrier suspends a call,**" the examiner respectfully disagrees. Despite the Appellant's arguments that Boughman does not teach this, Akinpelu, col. 4, lines 1-5 was used to reject this limitation. The citing relates to the result of a test (303) if a test is a toll call or a local call. Pending the result of this test, the call must be suspended (since this test occurs after the local exchange carrier receives the call (Akinpelu col. 3, lines 51-54)). Additionally, local database(s) and national database(s) may be queried to determine where to route the call between interexchange and/or local carriers. Pending the results of these database

Art Unit: 2161

queries, the call will also be suspended here (Akinpelu, col. 4, lines 5-15). Alternatively, Boughman can be seen in teaching this in Boughman, col. 5, lines 2-3 teaching “suspends the handling of a call” and Boughman, col. 7, lines 20-24 teach making a timer to allow the caller sufficient time to abort the call (prior to call completion). Making a timer to allow the caller sufficient time to abort the call (prior to call completion) is a form of call suspension (in one example it is suspended to play a notification recording to the caller).

Contrary to Appellant 's arguments there is sufficient basis that one skilled in the art would suspend the call at the interexchange carrier (IXC) instead of suspending the call at some SCP. First, as mentioned above, the suspension of a call can be construed as happening at many different areas (local carrier, IXC) as such there is a teaching for suspending the call at the IXC. Second, one of the IXC's jobs is to find a terminating carrier for the call. Upon going to an IXC, and making sure there is an available terminating carrier for the call (Akinpelu, col. 4, lines 14-25) it is known that a toll call will be made. Therefore prior to successful call completion (like in Boughman (see above)) the call will be suspended at the IXC prior to billing/call records being made (Boughman is concerned with giving the user the ability to avoid billing charges/records).

As to the Appellant's arguments with respect to Claims 9 (and 24) for the prior art(s) allegedly not teaching “**wherein at least one of the plurality of databases being queried to determine the caller's local service provider comprises a line information database,**” the examiner respectfully disagrees. The LUDB's and NUDB's from above are databases about phone lines/carriers, LNP etc. Therefore, they can be

Art Unit: 2161

considered/construed as (phone) line information databases. As shown above, these are queried to determine the caller's local service provider.

As to the Appellant's arguments with respect to Claim 28 for the prior art(s) allegedly not teaching "**wherein the query comprises a GetData query,**" the examiner respectfully disagrees. The LUDB's and NUDB's from above are databases that are shown in the teachings (Akinpelu, col. 4, lines 29-33 with Akinpelu, col. 4, lines 45-59 (with additional focus on Akinpelu, col. 4, lines 47-51) with Akinpelu, col. 4, lines 5-11) to return/get data upon querying. As such the queries submitted to them can be considered queries that get data, and get data queries.

As to the Appellant's arguments with respect to Claim 29 for the prior art(s) allegedly not teaching "**wherein the query comprises an originating line number screening query,**" the examiner respectfully disagrees. As discussed above and shown in the citings (Akinpelu, col. 4, lines 45-67), the ANI is used in billing. Billing customers is based on the calls and the ANI associated with the calls (to determine who is billed). This is a form of originating line number (ANI) screening. The ANI must be obtained by some means of querying. As such, the query comprises an originating line number screening query.

As to the Appellant's arguments with respect to Claim 30 for the prior art(s) allegedly not teaching "**wherein the query comprises a billed number screening query,**" the examiner respectfully disagrees. See the response directly above.

As to the Appellant's arguments with respect to Claim 31 for the prior art(s) allegedly not teaching "**sending a request to an access routing guide to determine**



Art Unit: 2161

**which of a plurality of database to query,”** the examiner respectfully disagrees.

Akinpelu, col. 7, lines 20-25 was used to map to this limitation. This citing in Akinpelu mentions a Local Exchange Routing Guide (LERG). This LERG is the claimed access routing guide. By this name, it is a routing guide at the local exchange carrier. From the discussions above, the local exchange carriers are queried in order to determine how to route calls for call processing. The discussions in Akinpelu, col. 7, lines 7-25 relate to information stored in the LUDB (NPA-NXX and LRN's (described for LNP in Akinpelu, col. 6, lines 25-33)). As such, the LERG appears to be nothing more than the LUDB. In fact, the function of the LUDB is for, eventually, finding a terminating carrier (routing calls) (see Akinpelu, Fig. 7, and the teachings regarding Fig. 7). As such, a request is sent to the LUDB/LERG to determine which of a plurality of databases to query (determine what interexchange carrier to query or what end office will service the call). Additionally, Akinpelu, col. 3, lines 7-23 teaches that the local exchange databases can be shared among all the local exchange carriers. When they are shared, they will need to know what shared database to query to get the information.

As to the Appellant's arguments with respect to Claims 32 (and 39) for the prior art(s) allegedly not teaching **“wherein the access routing guide comprises a line information database (LIDB) access routing guide,”** the examiner respectfully disagrees. As discussed above, the LUDB is the access routing guide, and the LUDB is a line information database (since it is a database about phone line information). As such, the routing guide is a line information database.

As to the Appellant's arguments with respect to Claim 33 for the prior art(s) allegedly not teaching **“an identification of the new or actual revenue accounting office, account owner, and billing service provider associated with the telephone number of the caller,”** the examiner respectfully disagrees. Akinpelu, col. 4, lines 45-67 with Akinpelu, col. 5, lines 13-16 with Akinpelu, col. 5, lines 31-36 was used to reject this limitation. The citing in Akinpelu, col. 5, lines 31-36 teaches that a revenue accounting office must be identified since revenue is provided to the appropriate people. This revenue office could be the IXC making the billing/call records. An account owner is also identified (the caller identified by telephone number of the caller (ANI). Even if the caller is not the account owner (e.g. spouse of the owner) at least an account owner will be identified since an account owner will be billed for a toll call). A billing service provider is also identified by using an IXC or local carrier (like and IXC maintaining billing records acting as a billing service provider or the local carrier being a billing service since they bill their customers for telephony service(s)).

As to the Appellant's arguments with respect to Claim 34 for the prior art(s) allegedly not teaching **“wherein the first format comprises a text format,”** the examiner respectfully disagrees. Akinpelu, cols. 8-9, lines 51-5 was used to reject this limitation. This citing teaches exemplary various messages sent to route a call. Specifically, the DN (dialed number) is analyzed and a database query is launched to the appropriate NUDB with the DN. These queries lead to the caller's local service provider being identified. It should be noted that the DN shown in Akinpelu is in a text

Art Unit: 2161

format, and it comprises an ASCII text format (numbers and parenthesis are found in the ASCII text).

As to the Appellant's arguments with respect to Claim 35 for the prior art(s) allegedly not teaching "**wherein the first format comprises ASCII text,**" the examiner respectfully disagrees. The response directly above serves as a response to this argument.

As to the Appellant's arguments with respect to Claim 36 for the prior art(s) allegedly not teaching "**wherein the second format comprises an SS7 format,**" the examiner respectfully disagrees. Akinpelu, cols. 8-9, lines 51-5 was used to reject this limitation. This citing teaches exemplary various messages sent to route a call. Specifically, it teaches an SS7 IAM message from an originating IC switch to an end office (a request to determine which of a plurality of databases to query). This SS7 IAM messages leads to the identification of what database to query (as cited in the indep. claim (and described further below)).

As to the Appellant's arguments with respect to Claims 42 (and 43) for the prior art(s) allegedly not teaching "**wherein the requests include queries and responses, and the first and second formats of the requests enable queries and responses to be correlated, thereby enabling the identification of the local service provider to occur in real time,**" the examiner respectfully disagrees. The subject matter of Claims 42 and 43 appear to be taught by Akinpelu as cited above (Akinpelu, col. 4, lines 45-59 with Akinpelu, cols. 3-4, lines 53-5). Akinpelu is generally concerned with connecting telecommunication links. In the art this is known to be a fast process nearly

Art Unit: 2161

approximately, if not exactly, real-time. Akinpelu even strives to maintain the near instant if not real-time connectivity of the past in Akinpelu col. 6, lines 40-41 by using the LRN to allow for the continued use of current network routing methods. Also, since the queries and responses must be correlated in order to obtain any use from the databases (the switches and determinations (includes queries and responses), for example, must be done in a sequence in order for the call to complete, this is a form of correlation in Akinpelu).

As to the Appellant's arguments with respect to Claims 2 (and 18) for the prior art(s) allegedly not teaching "**wherein the determining of message type is based upon a cost associated with each of a plurality of available message types,**" the examiner respectfully disagrees. Cochrane, col. 8, lines 40-53 with Cochrane, col. 12, lines 17-29 was used to reject this limitation. The Appellant argues that the claimed "cost" related to a monetary cost. The examiner respectfully submit that monetary cost is not claimed. The cited sections of Cochrane teach that a query is selected based on the cost (processing impact) it will have on a database. The a query with the least cost query plan is selected to be transmitted to the relevant database. This teaching maps to the claimed wherein the determining of message type is based upon a cost associated with each of a plurality of available message types. The articulated reasoning for combining Cochrane with the other prior art(s) is that Cochrane would make faster databases of Akinpelu (by reducing query impact on the database, thus increasing the usefulness of the databases).

As to the Appellant's arguments with respect to Claims 3 (and 18) for the prior art(s) allegedly not teaching **"wherein the determining of message type is based upon the message type supported by the identified database,"** the examiner respectfully disagrees. Kung, cols. 6-7, lines 35-3 with Akinpelu, col. 5, lines 60-65 was used to reject this limitation. The cited sections of the prior arts, Kung teaches mapping one query type to at least another format (query translation) based on what query types a database can receive (database management systems 36 and 40 of Kung). This teaches the claimed limitation of wherein the determining of message type is based upon the message type supported by the identified database. The Appellant further argues that Kung has little to no relevance with the claimed invention. Kung, however, in col. 3, lines 35-45 for instance relates the Kung invention to the telephony arts. As such Kung is related to the claimed invention and the other prior arts used in combination with it.

As to the Appellant's arguments with respect to Claim 21 for the prior art(s) allegedly not teaching **"wherein the request to identify the true identity of the new or actual service provider of the caller is received prior to the telephone call being connected to the called party,"** the examiner respectfully disagrees. As discussed above, and in cited Akinpelu, col. 4, lines 45-59 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33, Akinpelu teaches that the originating carrier is identified during call processing/routing. This is prior to a telephone call being connected to the called party.

As to the Appellant's arguments with respect to Claim 22 for the prior art(s) allegedly not teaching **"wherein the request to identify the true identity of the new or actual service provider is received during the pendency of the telephone call,"** the examiner respectfully disagrees. As discussed above, and in cited Akinpelu, col. 4, lines 45-59 with Akinpelu, col. 3, lines 50-54 with Akinpelu, col. 5, lines 60-65 with Akinpelu, col. 4, lines 29-33, Akinpelu teaches that the originating carrier is identified during call processing/routing. Call processing/routing can be construed as during the pendency of the telephone call, since call processing/routing is required for the telephone call.

As to the Appellant's arguments with respect to Claim 37 for the prior art(s) allegedly not teaching **"wherein the request is received after the call has been connected to the called party and before the call has been disconnected,"** the examiner respectfully disagrees. As discussed above, and in cited Akinpelu, col. 4, lines 45-59, when a toll call is made, a call detail record is created at the IXC comprising, among other things, the originating and terminating local carrier identification and elapsed time for the call. The only way an elapsed time for a call can be recorded is if the call has been connected to the called party. This record is created during the identification of the originating and terminating local carriers. As such, the request to identify the originating local carrier is received after the call has been connected (via the IXC) to the called party since it is after the IXC connects to the terminating carrier and before the call has been disconnected since elapsed time is recorded once the call is routed to the terminating carrier.

As to the Appellant's arguments with respect to Claim 38 for the prior art(s) allegedly not teaching **"the identified database having been identified as a result of a request sent to an LNP database and a request sent to an access routing guide,"** the examiner respectfully disagrees. "The identified database having been identified as a result of... a request sent to an access routing guide" argument has been met above with respect to the argument regarding Claim 31. "The identified database having been identified as a result of a request sent to an LNP database" Akinpelu, col. 6, lines 25-33 with Akinpelu, col. 7, lines 20-25 and Akinpelu, col. 3, lines 53-63 (from the indep. claim(s)) were used to reject this limitation. From the citings is it clear that Akinpelu has support for LNP, and Akinpelu, Fig. 2, LNP databases (LNP being in NUDBs and LUDB's). These databases are queried primarily in order to determine what is the terminating carrier (having an LUDB of it's own) for a phone call (indirectly it also obtains the originating carrier) (Akinpelu, col. 4, lines 45-59). As such, a database is identified as a result of a query sent to an LNP database.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/BRENT STACE/

Examiner, Art Unit 2161

Art Unit: 2161

Conferees:

/Apu M Mofiz/

Supervisory Patent Examiner, Art Unit 2161

/Eddie C. Lee/

Supervisory Patent Examiner, TC 2100